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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/810,410	03/19/2001	Talmon Marco	1188/18	5989

7590

10/20/2005

DR. MARK FRIEDMAN LTD.
c/o Bill Polkinghorn - Discovery Dispatch
9003 Florin Way
Upper Marlboro, MD 20772

EXAMINER

DENNISON, JERRY B

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/810,410

Applicant(s)

MARCO ET AL.

Examiner

J. Bret Dennison

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 61-80 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 61-80 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This Action is in response to RCE for Application Number 09/810,410 received on 19 July 2005.
2. Claims 61-80 are presented for examination.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 19 July 2005 has been entered.

Claim Objections

4. Claim 62 is objected to because of the following informalities: Claim 62 includes the limitation "wherein said intercepting the query and the is performed". The term "response" may have been accidentally deleted. Examiner will interpret the limitation to read "wherein said intercepting the query and the response is performed". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 65 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 65 recites the limitation, "wherein said intercepting is performed by redirecting". Examiner is unclear what is being redirected. Examiner would like to point out that there is no period at the end of this claim, and is unsure if the limitation was unfinished.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 61, 75, 80 rejected under 35 U.S.C. 103(a) as being unpatentable over Farber et al. (U.S. Patent Number 6,185,598) and Feigenbaum (U.S. Patent Number 6,339,785).

5. Before a detailed mapping, and as discussed in the previous office actions, a short discussion about the claim interpretation should be made to clarify use of terms and also to help Applicant in clarifying Examiner's understanding of the claimed invention.

A client-to-client network involves two clients interacting with each other, in the case of the Applicant's claims, to share information. The first client requests data and the second client responds with the requested data. Because the second client is servicing the request, the functionality of the second client is the functionality of a server. Therefore, the client-to-client network includes the functionality of a client-to-server network in each direction, depending on which computer is requesting (client) and which computer(s) are servicing that request (server). So the same functionality is repeated in both directions.

6. In context of the present invention, a client provides a request and at least two "computers that are able to service the request" respond with portions of the data that make up the complete response. Then, only a portion of the response must be provided to the client. The term client, as used in the claimed invention will be interpreted as computer, since in the context of the present invention, the term client has the functionality of both a client and a server.

Regarding claims 61, 75, and 80, Farber disclosed in a network environment, intercepting client requests at a server, known as a repeater, and the repeater responds by returning the requested resource to the client. If the repeater has a local copy of the resource then it returns that copy, otherwise it forwards the request to the origin server to get the resource, saves a local copy of the resource in order to server subsequent requests, as well as send the resource to the requesting client (Farber, col. 3, lines 15-30). This shows the functionality of intercepting queries and response portions, and transmitting the portions to the requesting device.

Farber did not disclose the functionality of a repeater wherein the response portions are received from two or more clients, and the repeater aggregating these response portions into a response before transmitting at least a portion of the response to the client.

In an analogous art of networking, Feigenbaum disclosed wherein a client (Feigenbaum, Fig. 1, 10) of the network operates a software program which implements a query and at least two other clients of the network each provide solely a portion of a response to the query, whereby the response to the query includes a plurality of response portions from the at least two other clients (Feigenbaum, Fig. 1, 12, 14, 16). Feigenbaum disclosed the aggregation being performed at the requesting client (Feigenbaum, Fig. 1, 20).

Farber provides an accelerated method of downloading files over the network which lessens the traffic burden on the entire network (Farber, col. 1, lines 18-22), by caching responses throughout the network causing less bandwidth to be used, improving performance for distant clients.

Feigenbaum provides a more efficient way to download a file through a network by simultaneously downloading sections of the file from multiple servers, which makes downloading faster due to retrieving file portions through multiple transfer links (Feigenbaum, col. 1, lines 30-40).

It would have been obvious to move the aggregation functionality to an intermediate device, such as the repeater of Farber, to provide such functionality to other clients of the network, as well as to place less burden on the client in having to

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perform the aggregation itself, saving processing time at the client. [Separation of Parts see *Nerwin v. Erlichman* 168 USPQ 177 (1969)].

Therefore, it would have been obvious to incorporate the teachings of Feigenbaum into the repeater/server of Farber to provide a more efficient way of downloading files by offloading processing of requests for portions of files to repeaters across the network to improve performance for distant clients (Feigenbaum, col. 1, lines 22-27, col. 2, lines 55-60).

7. Regarding claim 62, Farber and Feigenbaum disclosed the limitations, substantially as claimed, as described in claim 61, including wherein said intercepting the query and the

8. is performed by a plurality of acceleration servers operatively connected to the client-

9. to-client network, and different response portions are intercepted by each acceleration

10. server (Farber, col. 5, lines 10-20).

11. Regarding claim 63, Farber and Feigenbaum disclosed the limitations, substantially as claimed, as described in claim 61, including wherein another acceleration server is a client of the client-to-client network, the method further comprising the step of:

12. (d) relaying solely a portion of the response from said another acceleration

13. server to said acceleration server (Feigenbaum, Fig. 1, 12).
14. Regarding claim 64, Farber and Feigenbaum disclosed the limitations, substantially as claimed, as described in claim 61, including wherein said acceleration server is further operatively connected to a server of a client-server network whereby said intercepting reduces traffic through said server (Farber, col. 2, lines 55-60).
15. Regarding claim 65, Farber and Feigenbaum disclosed the limitations, substantially as claimed, as described in claim 61, including wherein said intercepting is performed by redirecting (Farber, col. 5, lines 5-20).
16. Regarding claim 66, Farber and Feigenbaum disclosed the limitations, substantially as claimed, as described in claim 65. Farber and Feigenbaum did not explicitly state wherein said redirecting is performed by a layer 4 switch.

However, layer 4 of the OSI model is the Transport Layer, which provides transparent transfer of data between end users, thus relieving the upper layers from any concern with providing reliable and cost-effective data transfer. The transport layer controls the reliability of a given link. Some protocols are stateful and connection oriented. This means that the transport layer can keep track of the packets and retransmit those that fail. The best known example of a layer 4 protocol is TCP.

Farber disclosed the repeater detecting failure through TCP/IP (Farber, col. 21, lines 30-35). Farber also disclosed that the functionality of the reflector/repeater includes redirecting client requests (Farber, col. 3, lines 15-35).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention that the functionality of the reflector/repeater includes redirecting client requests using layer 4 switching, since the TCP protocol is used.

17. Regarding claim 67, Farber and Feigenbaum disclosed the limitations, substantially as claimed, as described in claim 61, including wherein said acceleration server is selectably either: in a local area network, in a server at a cable television provider junction, at a satellite relay link, or within an ADSL junction (Farber, col. 16, lines 1-10).

18. Regarding claim 68, Farber and Feigenbaum disclosed the limitations, substantially as claimed, as described in claim 61, including wherein said query includes a request for data and the response includes said data (Farber, col. 3, lines 15-25).

19. Regarding claim 69, Farber and Feigenbaum disclosed the limitations, substantially as claimed, as described in claim 68, including wherein said data is in a format selected from the group of file types consisting of M133, Dvid, MPEG-Z, MPEG-I, M-JPEG, MPEGJ, ActiveMovie/Video for Windows (.avi), QuickTime (.mov),

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Realvideo(.rm and .rnm), H263.1, HTML, Flash, Gif Tif mpeguid and exe (Farber, col. 4, lines 50-65).

20. Regarding claims 70 and 71, Farber and Feigenbaum disclosed the limitations, substantially as claimed, as described in claim 61, including the step of prior to said transmitting:

(d) analyzing the response portions based on at least one variable; and

(e) storing the response portions based on said at least one variable

wherein said variable is selected from the group consisting of temporal information, ordinal information, frequency information, client information and identification information. (Farber, col. 4, lines 29-38, Farber disclosed storing the response portions based on client requests).

21. Regarding claim 68, Farber and Feigenbaum disclosed the limitations, substantially as claimed, as described in claim 61, including the step of prior to said transmitting:

(d) analyzing a direction of the response portions in accordance with a cache policy, wherein said cache policy is selectably either unidirectional or bidirectional (Farber, col. 5, lines 20-26).

22. Regarding claims 73 and 74, Farber and Feigenbaum disclosed the limitations, substantially as claimed, as described in claim 61, including (d) checking availability of

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at least one other client of the at least two other clients prior to said intercepting said response portion from said at least one other said client and further includes checking availability of requested data stored on said at least one other client (Farber, col. 8, lines 30-35).

23. Claims 76-79 include limitations substantially similar to claims 61-75, and 80 and are therefore rejected under the same prior art as being substantially similar.

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.


In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

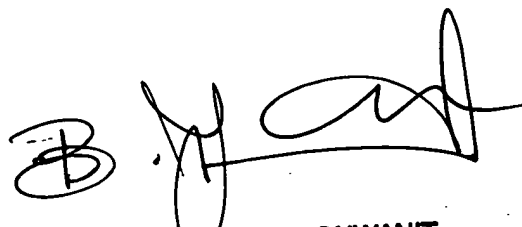
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Bret Dennison whose telephone number is (571) 272-3910. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


J. B. D.
Patent Examiner
Art Unit 2143


BUNJOB JAROENCHONWANIT
PRIMARY EXAMINER